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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,415	11/29/2000	Rakesh Taori	PHN 17,762	9540

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

CHAWAN, VIJAY B

ART UNIT PAPER NUMBER

2654

DATE MAILED: 02/09/2005

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/725,415

Applicant(s)

TAORI, RAKESH

Examiner

Vijay B. Chawan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because "Fig.1" present at the bottom of the abstract is redundant and should be removed. Correction is required.

See MPEP § 608.01(b).

Allowable Subject Matter

2. Claim 11 is allowed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 4-5, and 9-10, are rejected under 35 U.S.C. 102(b) as being anticipated by McAulay et al., (4,885,790).

As per claim 4, McAulay et al., teach a method of decoding a sound signal comprising the steps of; selecting a stream which includes a plurality of frames, in which each frame contains information about a segment of the sound signal(Col.2, lines 4-5), generating sine waves for each segment of the sound signal for which a

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corresponding frame is present in the selected stream (Col.2, lines 10-13), which sine waves are based on the information in the corresponding frame (Col.2, lines 5-8), and, generating sine waves for each segment of the sound signal for which no corresponding frame is present in the selected stream (Col.2, lines 8-10, values are interpolated), which sine waves are based on the information in the frames corresponding to a segment selected from a segment immediately preceding and a segment immediately following the respective segment, thereby reconstructing the sound signal (Col.2, lines 7-8).

As per claim 5, McAulay et al., teach the decoding method as claimed in claim 4, wherein the sine waves are generated for a segment of the sound signal for which no corresponding frame occurs in the selected stream, but for which a corresponding frame does occur in another stream, which sine waves are based on the information in the corresponding frame from the other stream (Col.2, lines 8-13).

As per claim 9, McAulay et al., teach a system for decoding a sound signal comprising a processor configures to select a stream of numbered frames of a plurality of frames, in which each frame contains information about a segment of the sound signal (Col.2, lines 4-5), generate sine waves for each segment of the sound signal for which a corresponding frame is present in the selected stream (Col.2, lines 10-13), which sine waves are based on the information in the corresponding frame (Col2, lines 5-8), and, generating sine waves for each

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segment of the sound signal for which no corresponding frame is present in the selected stream (Col.2, lines 8-10, values are interpolated), which sine waves are based on the information in the frames corresponding to a segment selected from a segment immediately preceding and a segment immediately following the respective segment, thereby reconstructing the sound signal (Col.2, lines 8-13).

As per claim 10, McAulay et al., teach the decoding system as claimed in claim 9, wherein the sine waves are generated for a segment of the sound signal for which no corresponding frame occurs in the selected stream, but for which a corresponding frame does occur in another stream, which sine waves are based on the information in the corresponding frame from the other stream (Col.2, lines 8-13).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 6-8 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over McAulay et al., (4,885,790) in view of George et al., (5,504,833).

As per claim 1, McAulay et al., teach a method of coding a audio signal comprising the steps of:

subdividing the sound signal into a plurality of segments, each segment is coded to a corresponding frame wherein the sound signal is coded to a corresponding frame, wherein the sound signal is represented as a set of sine waves defined by their amplitude and frequency (Col.2, lines 4-5, 38-43);

grouping the frames into n streams (Col.2, lines 3-13: components are tracked from one frame to the next, and values are interpolated of the components from one frame to the next to obtain a parametric representation of the waveform. This is equivalent to numbering and subdividing frames in a number of streams).

McAulay et al., however while teaching buffers to store data, specifically do not teach storing the amplitude and the frequency of each sine wave in a segment in a frame, independently of other segments. George et al., do teach storing parameter data which is equivalent to storing the amplitude and the frequency of each sine wave (which are data parameters) in a segment in a frame, independently of other segments (Fig.12, item 1211, Col.16, lines 45-59). Therefore it would have been obvious to incorporate the storing of data as taught by George et al., in the method of McAulay et al., because an artisan would realize that this would

provide a method with the ability to synthesize sounds with computational efficiency.

As per claim 2, McAulay et al., teach the method of claim 1, wherein the phase of each sine wave in a segment is stored in the frame corresponding to this segment (Col.8, lines 1-3, 13-15, 34-35, Fig.6, item 40).

As per claim 3, McAulay et al., teach the method of claim 1, wherein n equals 2 (Col.2, lines 12-13, a series of sine waves are generated and the number of waves is more than 1, i.e., 2).

As per claim 12, McAulay et al., teach the method of claim 1, wherein the frames are numbered and grouped into n streams, where frame number is (i) is assigned to stream (i) modulo- n (Col.8, lines 1-3, 13-15, 34-35).

Claims 6-8, and 13 are directed toward a system to implement the method of claims 1-3, and 12, and are rejected under similar rationale.

Response to Arguments

7. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vijay B. Chawan whose telephone number is (703) 305-3836. The examiner can normally be reached on Monday Through Thursday 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (703) 305-9645. The

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fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Vijay B. Chawan
Primary Examiner
Art Unit 2654

**VIJAY CHAWAN
PRIMARY EXAMINER**

vbc
2/5/05